

INTERSPACE

THE EUROPEAN SATELLITE & SPACE NEWS

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NEWS & ANALYSIS

EUTELSAT'S ARTICLE XVI AND SES

★ Delegates from 25 of the 26 member countries of Eutelsat took part in the first meeting of the Assembly of Parties in Paris on 12-15th November. Amongst the issues raised was Societe Europeene des Satellites' GDL project. "Official release" of the assembly stated that the reaction was as follows:—

"The Assembly of Parties examined the question of the possible establishment in Europe of satellite systems separate from the Eutelsat system. The assembly pointed out that Eutelsat was designed for the operation of telecommunications space segments in Europe by establishing telecommunications satellite systems as part of an improved European telecommunications network for providing expanded telecommunications services to all participating states. To this end, considerable amounts have already been invested by most of the governments of Europe and the telecommunications administrations or recognised private operating agencies of the CEPT."

"The Assembly unanimously adopted a resolution in which, after noting that the organization is still in the initial stage of operation of its

system, it is stated that any other system operated in Europe for International telecommunications could but jeopardize the future and viability of the organization, the assembly drew attention, in particular, to Article XVI of the Eutelsat Convention concerning the establishment, acquisition or utilization of satellite systems in Europe separate from the Eutelsat system."

"The Assembly of Parties decided to reaffirm the importance that all Eutelsat parties and signatories attach to the achievement of the objectives laid down in the convention and urges all parties and signatories to take all necessary actions to ensure the viability of the Eutelsat system."

Eutelsat itself has expanded on the rather wordy position of the Assembly of Parties. Eutelsat says that in regard to the scope of the assembly of parties' decision, Andrea Caruso "confirmed that the extremely profound concern expressed by the assembly was due to the private initiatives by Luxembourg to establish the GDL system which would become competitive with the Eutelsat system as early as 1987 and would doubtless cause



the latter serious economic harm. The resolution adopted by the assembly of parties must therefore be seen as an explicit invitation to all the governments of Europe and all the administrations of the CEPT to prohibit the use, in the territories under their jurisdiction, of the GDL system and any other similar system that might exist in the future."

The position taken by Eutelsat's executive viz-a-viz the GDL project have been known publically since the days of Coronet and on a first face basis bears a remarkable similarity to the position taken by Intelsat's executive in respect to the "new boys on the street" — PanAmSat, Orion etc. Nevertheless the underlying circumstances are significantly different.

Unlike the USA, Europe has no FCC to regulate (or deregulate) communications. The events that have led to the USA taking a deregulatory policy towards international satellite communications reflects prior trends in the deregulation of domestic terrestrial and satellite communications. When Intelsat was formulated in the early 1960's there was little between Intelsat's definition of public telecommunications and the FCC's (and Industry's) definition. However, in the gradual deregulation of domestic communications in the USA, including the process which led to the break-up of AT&T a legal distinction grew between the natural monopoly of public communications and enhanced services. Essentially public telecommunications became defined as conventional telephony and therefore subject to regulation and the rest of services as not subject to same degree of regulation.

Intelsat's Article XIV (c) and (d) so often quoted in the debate about allowing international satellite competition uses the term "international public telecommunications services" in determining economic harm. Unlike Eutelsat, much of Intelsat's traffic remains as trunk telephony and within the current US definition of public telecommunications. Intelsat's rivals state that much of its capacity is not very suitable for new services lying outside this newer definition.

However, Eutelsat's current, planned and potential capacity is technically much more suited to the non public telecommunications categories currently in vogue in US thinking. Eutelsat's current capacity is largely used for TV traffic which the Americans now consider as deregulated for both domestic and international satellite traffic. Eutelsat does not currently rely heavily from trunk telephony for its revenue.

To what extent Eutelsat's 26 member countries

distinguish between public and enhanced telecommunications as the USA has developed remains an open question. There is no overall body, such as the FCC, to define the difference and derive the regulatory and deregulatory practices. Such activities remain in the hands of national governments and possibly with the secretive CEPT, acting as a forum for European PTTs. Put another way the European definition(s) of telecommunications appear(s) to remain different from that of the USA, as does the use of Eutelsat vary from Intelsat. Coronet argued that the GDL system was not offering telecommunications capacity in competition with Eutelsat; there was a significant difference in that Coronet limited itself to broadcasting traffic whereas Eutelsat served PTT traffic.

Nevertheless it appears unacceptable to Americans that broadcasting via satellite remains regulated in the same manner as other forms of "public telecommunications" (however defined) and subject to PTT control as so far has been the case in Europe. In economic theory there is nothing to stop broadcasters negotiating directly with Eutelsat for suitable capacity, leaving Eutelsat to set prices for transponder leases and allocate its capacity directly between competing broadcasters. The current methodology is through the PTT's who, in nearly all European countries, are not subject to the deregulation seen in the USA. GDL may be a bigger threat to the entrenched position of PTT's than to Eutelsat.

Moreover, Eutelsat's political position is different to Intelsat. US industrial policy in the 1960's was important in forming Intelsat; similarly European industrial policy in forming Eutelsat in the 1970's. But Eutelsat has not had the long period of time that Intelsat has had to establish itself and Europe's still fragmented satellite industry is much newer and weaker than that of the USA. European governments are still pouring substantial sums into the development of commercial satellite technology. The market for satellites within Europe is much more limited than the US domestic market and it is politically difficult for European governments are willing to allow Eutelsat to lose out to competitors using US satellites.

Eutelsat is also in a difficult position because the European market for satellite communications capacity is so small in comparison with that facing Intelsat (and its competitors). European governments have already committed to substantial investment in the European space segment through the semi-operational Olympus, the regional Tele-X and domestic Telecom 1 and DFS Copernicus systems. Eutelsat has in the past

quoted figures of 800 km as the minimum for which telecoms via satellite becomes cost competitive with existing terrestrial systems, although for specialised traffic, notably distribution of TV channels the economics is primarily dependent on the number of head ends involved.

ITCA COMPANIES MOVE TOWARDS SUPER CHANNEL but questions remain

★ Fifteen UK independent TV companies and Independent Television News (which is owned by the fifteen) have agreed amongst themselves to form a new cable TV channel which appears to be in direct competition with Rupert Murdoch's Sky Channel. The Superchannel, aimed at Europe will use BBC programming as well as that of ITN and the ITV channels. Up to 30% of the programming could come from the BBC although the BBC would not be an equity member of Superchannel. It is not clear at this stage if all fifteen ITV companies will join in the channel. The Independent Broadcasting Authority is believed to be keen to see all fifteen join the advertising supported channel.

Current position indicates that the channel could be running by the Autumn of 1986 with up to 18 hours per day of programme. Entertainment format will be used, starting with breakfast television provided by TV-AM.

However, several questions remain open about the proposal, which will require some £20m of initial financing. Proposal requires ratification by the boards of the 15 ITV companies and there are known to be difference of attitude towards Superchannel. Some of the ITV companies have shareholders who are already participating in satellite TV. Thorn-EMI, with interests in Music Box, Premiere and the Childrens channel, has a 35% shareholding in the major ITV networking company Thames Television. The four other network companies also have a large amount of archive programming which may be better utilized by other satellite TV outlets. Thorn-EMI's attitude towards Superchannel is not clear, particularly in the light of its apparent intentions to divest itself of its screen entertainment activities.

Moreover, the logical destination for Britain's non film satellite TV channels is to establish themselves as terrestrial broadcasters (or, if DBS goes ahead, as DBS TV channels). Terrestrial option for the Superchannel, at least in the UK, appears to be a non-starter as it will be using programming and be owned by its "competitors." It is also a creation of Public Service Broadcasting entering a market increasingly influenced by "commercial" TV.

CONFUSION IN FRANCE OVER MEDIA DEVELOPMENTS

★ France's audiovisual policy appears to be confused. Elections have been set for March 1986 and the French socialists are looking for a start to broadcasting for the new terrestrial channels before that date. However, despite many announcements over the last year it looks as if the development of these two channels needs more time and some money.

Laurent Fabius's government announced in July that it intended to see the two private terrestrial channels in operation by the end of 1985, or, more precisely "around Christmas." The two new channels would be developed with private commercial funding. The French media speculated that Europe 1 would develop a Music Channel and RTL and Tele Monte Carlo a general channel. But the French government has still not selected who is to operate the two channels and it is too late to see the channels operational by Christmas and probably next March. New candidates to operate them have appeared alongside Europe 1 and RTL. Rupert Murdoch's and Albert Frere's Media International are amongst opportunists looking at the possibilities. Of more concern to the French is a recent joint venture between Groupe Schlumberger and ex P2 lodge member Silvio Berlusconi. CLT/RTL's Jacques Rigaud has invited Europe 1 to cooperate with it in the new opportunities. The French socialists are now in an uncomfortable position, with CLT/RTL apparently keen to get in on the act but holding back on the use of TDF-1 and two opportunists from America and Italy banging on the door.

But the French government appears to have got itself over a barrel with TDF-1, with no solution having appeared to the conflicting objectives of Jacques Pomonti and the government. Pomonti, like many commercial interests in Europe sees the 19°W as the likely dominant position for DBS TV, particularly as the UK's Unisat project (at 31°W) has collapsed and because the German TV-SAT also uses the same position. Pomonti's ambition is to see TDF-1 as a European DBS bird, whilst so far it appears that the government continues to aim for a compromise between political reality and its desire to see TDF-1 as a ticket to French broadcasting and nationalistic ambitions.

The Television par Satellites company has yet to be officially established. But it has won a little extra time. It appears that launch of TDF-1 (and TV-SAT) has been delayed about 3 months, although Arianespace has yet to publish its full 1986 launch manifest. A May 1986 launch slot was originally

booked for launch of TV-SAT. However, Eutelsat say that their Eutelsat I-F4 satellite and Spacenet 3 will be launched in May 86. It appears that TDF-1 will not be launched until the Autumn of 1986 and will not be operational until the Spring of 1987, just a few weeks before the launch of the first SES-GDL satellite.

Luxembourg's Prime Minister Jacques Santer recently visited Francois Mitterand and Laurent Fabius and discussed the agreement between the two countries on TDF-1 defined in the memorandum of agreement of 26th October 1984. He was told by the French that negotiations would restart in a few weeks. It appears that new principles for the agreement will be defined but it will be unlikely that CLT/RTL will retain the planned monopoly for advertising aboard TDF-1 channels.

The position is made even more complex by commercial problems with the Telecom 1. Although the DGT (Direction Generale des Telecommunications) has taken the decision to launch the third satellite in the series, it is understood to be facing problems in making a profit from the Ku-band transponders intended for business traffic. PTT Minister Louis Mexandeau has put a stop to their use for distributing television channels, apparently fearing concern about overspill of Telecom 1 footprints into non-French territories. However, this new policy appears at least to have been partially abandoned. The CFM 89 radio channel began using Telecom 1 on 1st November to transmit programming from Paris to regional subsidiaries in four cities — Saint Nazaire, Lyon, Toulouse and Limoges. CFM 89 is in fact the first satellite radio channel in Europe and is operating out of Europe 1's premises in Paris. CFM 89's Secretary General Giles Casanova has announced that it will transmit programmes to up to 20 regional radio stations from 1st January — "later, why not in Europe."

FT CONFERENCE REPORT — "Space the Commercial Benefits"

★ An estimated 70 delegates attended the Financial Times Conference on space held in London on 18th and 19th November. Conference took a general approach to space business, with strong emphasis on planned developments in in-orbit infrastructure surrounding the "international manned space station" but included sessions on Intelsat, insurance, finance and legal activities.

TDF-1 — Jacques Pomonti was billed to speak on developments in DBS systems but was unable to attend, apparently because he was asked not to do

so by the French government. A substitute speaker was not provided but Pomonti's paper was handed out to delegates. Paper gave little away about current position of the Television par Satellites' company. However, paper emphasized the European nature of potential TDF-1 activities. It emphasized the importance of the ground segment to European industry but had virtually nothing to say about programming. According to the paper there are some 170-330 million Europeans within the satellite footprint and TDF-1 "concerns an average market of 20 million antennae, which corresponds to 70-75 million European viewers..... we foresee the setting up of one million antennae in the first year of the satellite's operation, three million in the second year, before reaching a threshold of 10 million after four years and 20 million at the end of 7 years." Paper goes on to say that specific financing structures will be set up in order to "guarantee the feasibility of this growth, particularly at the level of setting up and distributing receiving equipment..... all systems of distribution will be applied: fitters, mass selling stores, mail orders; leasing terms will also be made available....." Less clear was a statement that "if the consumer pays some FFrcs200 for receiving the satellite during a period limited to 3 or 4 years, each programme will only cost FFrcs40-50 to begin with."

Paper shows that investment in TDF-1 is approximately FFrcs1 billion but the ground equipment market is worth around FFrcs100 billion. Annual programming costs are FFrcs4-8 billion. It lays considerable importance on programme production policy in Europe. It is an often forgotten point that satellite television is about television, not satellites. According to Pomonti the main stakes involved are a renewed drive for producing programming in Europe as against sourcing from the USA. TDF-1 will also allow an increase in European "multi-productions" which fell in 15 years from 100 to 30 for co-productions entailing three countries. It will replace the hitherto exclusively bilateral relations between the USA and European countries by a multilateral approach by programmers..... Owing to the new multinational approach, the costs of programs will be redeemed from a market much bigger than the actual national markets.

INSURANCE — The opportunity to question Jacques Pomonti was sorely missed by the press. However Brian Stockwell, presenting a paper on the uncertain insurance market, raised considerable interest. Stockwell described underwriters as disillusioned with the performance of space insurance and, topically, emphasized the threat of

a weak insurance market to "space commercialization" including commercial satellites. The big operators in the market such as Intelsat were large enough to self-insure. RCA Americom is expected to launch the RCA Ku-2 satellites on 27th November without cover from the market after receiving quotes believed to be 28.5%. At least two satellite projects had been scrapped within the last year because of high rates and the uncertainty of obtaining cover. Current state of the market was a major problem for "smaller" satellite operators who need to prove to their financiers that they can obtain adequate insurance before financiers agree to fund their projects. According to Stockwell the market in the near term is "shrinking and certainly coalescing." The market is unlikely to be able to provide more than \$100m on a single launch (which could involve up to 4 satellites). Market rates for launch coverage are now standing at between 20 and 30% but could settle out at around 20-25%. Life rates are 3-5%, up from 1% and in-orbit coverage is now only available for 12 months. Main theme of recent presentations in the house in Washington has involved (US) government insurance proposals. The proposals involve the government providing insurance cover a couple of percentage points above market rates until such time as the market provides sufficient capacity. Stockwell follows the line of James Barrett and much of the rest of the industry in rejecting the option. However Stockwell believes that rates "will take a long time to stabilize at the burning rate, settling at between 20-25%. Capacities will grow unless extraordinary disasters combine to intervene." In response to questioning, he admitted that underwriters had to date made a profit of \$60 million on life insurance but this sector would show a net loss in the event of only one loss.

INTELSAT — Intelsat's DG Richard Colino was in town to present a paper to the conference emphasizing that Intelsat had been commercializing space for many years. In response to questioning by Marconi's Sir Peter Anson, Colino outlined reasons why PTT's have not reduced their prices in line with reductions in Intelsat charges. Typically a PTT "receives 30-35% of its revenue from international services but spends 5-10% on international services." Lack of PTT sensitivity to passing on Intelsat price reductions leads to pressure for development of new satellite systems. Colino also expressed strong personal doubts about DBS TV: "Anyone in DBS is nuts" more tactfully saying that Intelsat sees no prospect for providing DBS capacity within the next 5-7 years. However he revealed that the provision of 30-40 Watt transponders on either Intelsat V or Intelsat VI satellites was currently under consideration.

Colino's not so revealing paper, covered, amongst other matters, competition from fibre-optic cables. "Technological advances in successive generations of Intelsat spacecraft have outdistanced submarine cables in three key international service criteria: capacity, network flexibility and reliability. The superiority of satellites over cables has become apparent in a fourth critical category that of connectivity." Although transoceanic fibre optic cables would be able to provide attractive rates cost per circuit was considerably higher. "If we examine the cost-per-circuit for a fully loaded fibre-optic cable facility, such as TAT-8..... with cost-per-circuit for a comparably equipped, fully loaded "cable-in-the-sky" configuration Intelsat VI satellite, the cost advantage is more than three-to-one in favour of Intelsat VI."

THE GREAT AND THE GOOD — Opening speech at the conference was given by Lord Lucas, UK Parliamentary Under Secretary of State for Trade and Industry. According to Lucas, business projections for space in the year 2000 are already exceeding \$20 billion a year. "Britain is probably the third biggest user of space systems in the world." (France may have something to say about this). "Employment in the British space industry is growing at more than 10% a year and current order book is twice the size of annual turnover, now standing at £250m."

BRITISH NATIONAL SPACE CENTRE

★ The new British National Space Centre came into being on 20th November. Appointment of Roy Gibson as Secretary General was known some time before the announcement but there are some surprises in the new organization.

It was originally expected to be located at either the Royal Aircraft Establishment, Farnborough, or at the Rutherford Appleton Laboratory in Oxfordshire, with Farnborough usually assumed as the much preferred choice. In the event, headquarters will be in London and staffed by a team of 30. Space Department at Farnborough and space activities of Rutherford Appleton will be part of the Space Centre, which, in effect is misnamed. Less surprising is that funding for BNSC comes out of existing space budgets, although potential projects in the pipeline including space station participation and HOTOL will require additional funding. Current annual funding of BNSC stands at £100 million.

According to the DTI, Farnborough and Rutherford Appleton will be the primary bases for in-house science and technology programmes. A small section of the RAE's Space Department will not be

transferred to the BNSC and will go to the Ministry of Defence instead. MoD contribution to the funding of BNSC is minimal, at around £4m per annum, the bulk of funding coming from the Science and Engineering Research Council and the DTI, with a small balance from the National Environment Research Council. MoD is reported to have been unhappy with the formation of BNSC.

Formation of the BNSC represents a move in civil service administration by the British Government. Guardian newspaper emphasized the use of the word "strategy" by Minister Geoffrey Pattie in announcing the centre. The Guardian regarded this as a significant change in outlook for a government committed (at least nominally) to free market economics. Perhaps more significantly it is one of the few attempts by the government since 1979 to reform the structure of and decision taking process within the Civil Service. It is a bone of contention within, for example, the Institute of Directors that the government has been so negligent in this field. On the other hand, it is a second de facto move towards the type of relationship the Japanese government has with its industry (and probably decades overdue); the first such move was the Alvey programme for pre-competitive R & D. The latter is similar to the European ESPRIT programme both in function and form. Both Alvey and ESPRIT are methods of subsidizing troubled industries but which present significant opportunities and benefits from inter-business and government-business collaboration. Similarly Eureka falls within the same objectives but although directly a response to SDI may, in the long term, prove to bear a stronger relationship to Japan's MITI. The BNSC has little direct relationship to France's CNES, not least because of its size and the history of its constituent parts. It will be interesting to see if it provides a model for other areas of industrial policy including telecommunications and broadcasting.

Address of the BNSC is Millbank Tower, Millbank, London, SW1P 4QU, Telephone 01-211 3000.

LA COMBINAZIONE (THE FIX)

★ A major move in Paris this week has established the first of the new French terrestrial channels and partially stitched up the use of TDF-1. In a deal signed in secret business deemed sympathetic to socialist causes has gained access to both TDF-1 and terrestrial broadcasting. Deal, which is almost universally seen as a political "fix" still leaves questions open about ~~the use of TDF-1~~. First of the terrestrial channels is expected to become operational on 20th February and will eventually go up on TDF-1. Channel will be largely

financed by Jerome Seydoux, his cousin, Christophe Riboud and Italian Silvio Berlusconi, with 60% of capital in French hands and 40% in Italian hands. French backers may take a stake in Berlusconi's TV interests, either directly or through his holding company Fininvest. Both Seydoux and Riboud are friends of the President. Riboud is the son of Jean Riboud, formerly Chairman of the Schlumberger group. Seydoux is Chairman of Chargeurs who, amongst other assets, own the UTA airline.

A second channel on TDF-1 has been allocated for ~~eight years to ex-socialist MP, Robert Maxwell~~ at an annual lease charge of FFrcs60 million. However, despite a lot of talk, Maxwell's plans for programming and financing the channel remain far from clear. Maxwell's channel will be English language and therefore his primary market will be the UK. Maxwell already controls the probably highly unprofitable Mirrorvision channel supplied to UK cablenets as well as a 13.8% stake in the ITV terrestrial network channel, Central Television. The IBA has asked him to step down as a director of Central because of his involvement in TDF-1. He is understood to be interested in taking over Thorn-EMI Screen Entertainment division which has stakes in Premiere, Music Box and The Children's channel. The components of a major broadcasting exercise appear to be within his grasp but such components do not come cheap.

Third channel to go up on TDF-1 will be Pierre Desgraupes' cultural channel which is in the process of shaping up.

The plan leaves one channel still available. The RTL-Radio Monte Carlo-Europe 1 grouping, connected to Rupert Murdoch through Media International, is reported to be stunned at the new arrangements. This axis has its sympathies to the right of the political spectrum and appears to have lost out in gaining access to the new French TV scene. "La Combinazione" also appears to have stitched up right winger Robert Hersant and opposition plans to deregulate and privatize. Hersant has been hoping to get his hands on one of the three existing national TV channels if they are, in the future, privatized.

HOTEL, HERMES AND SKYNET IVC

★ Annual Anglo-French summit meeting was held on 18th November in London between senior British Ministers, including the Prime Minister, and their French counterparts, including Francois Mitterrand, Laurent Fabius and Hubert Curien. According to the Department of Trade and Industry, space was amongst many matter discussed, although, as usual, the DTI was giving little away. Hubert Curien met Geoffrey Pattie on a one to one basis away from the main meeting.

Amongst issues raised were the launch of Skynet IVC, which the French wish to see launched atop Ariane. This would reduce the opportunities for the "cadre" of British astronauts and require modification to the satellite. Ariane 5, Hermes and HOTOL are also understood to have been discussed. No announcement on funding for HOTOL has been made yet, although the word is that it is in the bag. Aerospatiale are now actively looking at air breathing propulsion. Some ESA officials have expressed considerable private

doubts about the Ariane 5P/Hermes proposals particularly in respect of the HM-60 motor but it is not clear if these doubts have any influence on ESA policy. Funding for HOTOL is expected to be given for the period up until the end of 1986 and there is some UK pressure to see that its propulsion system details remain classified until that date, whereupon a European programme for the vehicle could be sought. UK Minister Geoffrey Pattie had a further meeting in London this week with UK industry representatives about HOTOL.

INTELSAT THINKS PACIFIC OCEAN CORRIDOR KEY MARKET IN INTERNATIONAL TELECOMMUNICATIONS

★ David Tudge, Deputy Director General of the International Telecommunications Satellite Organization (Intelsat), in an address before the Pacific Basin Information Industry Trade Mission and Conference on 15th November asserted that the Pacific Ocean region is expanding its lead over the Atlantic corridor, not only in its annual volume of international trade, but also in its expanding use of international satellite communications. He labeled the Pacific market "the ocean of the future" in these areas.

Tudge estimated that the Pacific will surpass Atlantic Ocean international trade by over 30 billion dollars in 1985. He also said that the Pacific region enjoys an annual traffic growth rate of approximately 20 per cent in its use of Intelsat satellites — far higher than in other ocean regions.

Stressing the importance of global communica-

tions interconnectivity that is achieved through the Intelsat system, Tudge cautioned that attempted fragmentation of international telecommunications, based on recent alterations in US policy, would harm both developing and industrialized countries. A deregulated international telecommunications environment could lead to nationally defined "quotas" for communications on particular systems, and to retaliatory tariffs and non-tariff barriers.

Tudge emphasized that there is nothing within the Intelsat framework that discourages any country's government from introducing "service competition", a factor to which Intelsat is already adjusting. However, he noted "facility competition" is a serious concern, particularly because it is likely to result in excess capacity and excess capital investment in some international routes.

HUGHES COMMUNICATIONS, TELESAT CANADA AGREE TO COOPERATE ON DEVELOPMENT AND OPERATION OF MOBILE SATELLITE SERVICE

★ Hughes Communications Mobile Satellite Services Inc. and Telesat Canada have announced an agreement to cooperate in the development and operation of commercial mobile satellite systems to serve the US and Canada.

Mobile satellite systems will use US and Canadian satellites operating in the UHF, L and Ku bands to provide two-way mobile voice and data communications services.

Hughes requested authorization from the US Federal Communications Commission to construct, launch and operate such a system last May. Telesat has already been designated as Canada's mobile satellite operator by the Canadian Department of Communications.

The agreement states seven "general principles of cooperation" covering functional system requirements, spacecraft specifications, frequency utilization, spacecraft and network control systems, operations, mobile terminal specifications, and system expansion.

Hughes has stated that, if authorized to operate a mobile satellite system, it would launch a spacecraft in mid-1990.

Hughes Communications Mobile Satellite Services Inc. is a wholly owned subsidiary of Hughes Communications Inc., itself a wholly owned subsidiary of Hughes Aircraft Company.

SHORT NEWS

★ Sir James Cruthers has been appointed Chairman of News International replacing David Berriman who remains on the Board. Cruthers is a Director of The News Corporation which is the parent company of News International PLC.

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★ Ford Aerospace has received an order for a further INSAT spacecraft, denominated INSAT 1D. Satellite will have several advancements over previous satellites including a larger propulsion tank and an additional redundant TWTA.

★ Trade reports suggest that merger of the two British film channels, Premiere and Mirrorvision, carried by satellite, are likely to merge. It has long been argued that the market is only big enough to support one channel. Publisher Robert Maxwell created Mirrorvision out of the ashes of the collapsed TEN channel, a move seen as a step to increasing his negotiating position for a future merger.

★ NEO has ordered a (MEA 03 type) star simulator from SODERN of France. Equipment is used to obtain space qualification of star trackers to be used aboard scientific, telecommunications or earth observation satellites.

★ RAI Uno has, since the 1st November, been distributed on the Zurich cable network. It says it is negotiating with other Swiss cable operators and with cablenets in the Netherlands and Luxembourg.

★ Speaking at Mediacom 85 last week Sky Channel's Patrick Cox has attained a level of 5 million homes but emphasized the difficulty in making profits and negotiating with national PTT administrations. The channel would begin to make profits in mid-1986.

★ Filmnet, who used the Belgian RTT transponder on Eutelsat I-F1 under an annual lease of \$2.2 million says that it is negotiating with Flemish cable networks to gain access. It is testing what it describes as multilingual decoders to make its programming available in English, German, Dutch and French. Filmnet also say they are aiming for the channel to become available on Swedish and Danish cable networks. Peter Woodward, formerly Managing Director of Atari International has been appointed Managing Director of Filmnet.

★ Clair Enders of Thorn-EMI Screen Entertainment has left and joined the Virgin Group as part of a team looking at opportunities in broadcasting. Virgin, who have a stake in Music Box, were one of the few UK companies to submit an expression of interest in DBS TV to the IBA by 31st October. Virgin's CEO Richard Branson last week said in public that the company was interested in bidding, as part of a consortium, for a franchise for a UK ITV channel when the franchises come up for renewal from 1988.

★ Dutch ground equipment manufacturer TRATEC has brought out a low cost modulator. Features include crystal controlled vision IF carrier oscillator, IF section with SAW filter, vestigial side band suppression and a group delay pre-correction of 170 nsec. Price is approx. DFIs 1,400 (ex-works) for an IF output modulator and approx. DFIs 2,135 for a modulator with VHF channel output. Further details from Mr. K. Van der Schaaf, Tratec BV, PO Box 385, 3900 AJ Veenendaal, telephone 8385-21984.

★ SES signed the contract on 15th November for the launch of its first satellite with Arianespace. Sources suggest that political considerations were paramount in opting for Arianespace over NASA's now very aggressive option. SES is facing considerable criticism from Eutelsat (see elsewhere in this issue) and procurement of its space segment from the USA is unlikely to endear European governments responsible for both industrial and telecoms policy. SES are also making publicity about its insistence that European systems be incorporated in its RCA designed Control Centre and uplink facilities. Construction of these is due to start in the Spring of 1986, although a site in Luxembourg has still to be chosen. SES says that it intends to recruit a further 50 staff for next year.

★ Eutelsat's Assembly of Parties has approved a protocol providing for the establishing of official relations between Eutelsat and Intelsat. Jean-Francois Bouffandeau (France) has been elected Chairman of the Assembly and Mr. B. Vrec (Netherlands) Vice-Chairman.

★ Environmental Research Institute of Michigan has announced that the Fifth Thematic Conference, Remote Sensing for Exploration Geology, called "Mineral and Energy Exploration: Technology for a Competitive World" is to be held in Reno, Nevada on 29th September to 2nd October 1986. Also announced is the 20th International Symposium on Remote Sensing of the Environment to be held in Nairobi, Kenya on 4th-10th December 1986. Further details available from Dr. Robert Rogers, ERIM, PO Box 8618, Ann Arbor, Michigan 48107, USA, Telephone 313-994-1200.

★ French PTT Ministry has signed launch contract with Arianespace for launch of Telecom 1C.